Jan. 17, 1933. M. E. BAKER 1,894,814

REGISTERING GOLF TARGET

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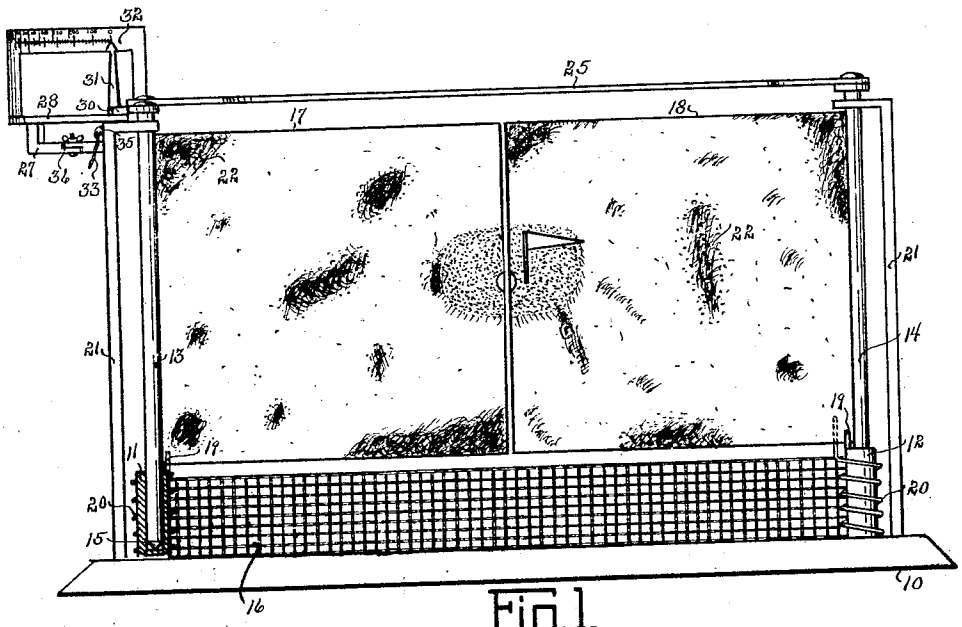


Fig. 1.

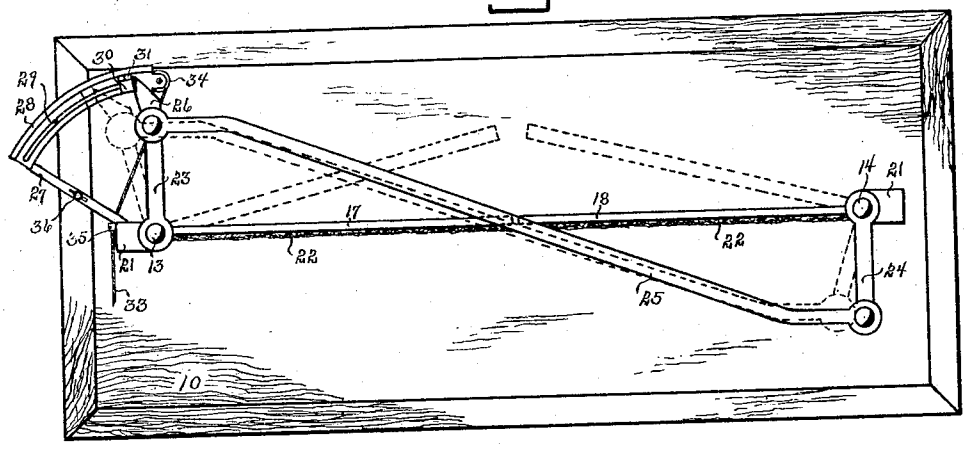


Fig. 2

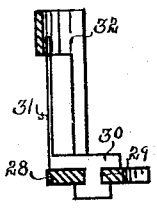


Fig. 3.

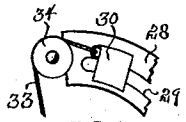


Fig. 4

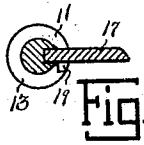


Fig. 5.

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UNITED STATES PATENT OFFICE

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REGISTERING GOLF TARGET

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The principal object of this invention is to provide a golf target that not only provides conditions similar to those experienced when playing an actual game of golf, but permits the enjoyment of the same delightful exercise obtained in playing golf.

A further object of my invention is to provide a golf target that registers in yards the possible distance the golf ball would have gone had it not struck the target.

A still further object of this invention is to provide a registering golf target that automatically and relatively penalizes, in distance yards, a golf ball not striking the center of the target, thereby providing a mechanical target that registers both as to direction and speed of a golf ball struck with a golf club.

A still further object of my invention is to provide a mechanical registering golf target that requires a very small space and does not damage the golf balls that strike it.

A still further object of this invention is to provide an accurately registering golf target that permits the use of any or all of the golf clubs used in an actual golf game.

A still further object of my invention is to provide a recording golf target that is economical in manufacture and durable in use.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Fig. 1 is a front view of my complete invention ready for use.

Fig. 2 is a top plan view of the device and more fully illustrates its construction.

Fig. 3 is a cross sectional view of the registering mechanism.

Fig. 4 is a bottom view of a portion of the registering mechanism and illustrates the manner of returning the same to a neutral position.

Fig. 5 is a top sectional view of one of the target wing supporting posts and bearings and illustrates the manner of limiting the forward swinging of the target wing beyond a predetermined position.

The game of golf is one of our most popular sports. Because golf courses require a large area of ground, and, therefore, must be located a considerable distance from urban districts, many miniature devices have been fabricated in an attempt to appeal to golf lovers who do not have the time or facilities to engage in a game of golf on an actual golf course. The chief objections to such indoor or in-town devices are that the player is not permitted to use distance driving clubs, does not experience vigorous exercise and does not develop a skill that will aid him to play a better game of golf on an actual golf course.

I have overcome all of these objections by providing a golf target that promotes the ability of the user as a golf player when he does play golf on an actual golf course. I have used the numeral 10 to designate the base portion of my invention, which may be made of any suitable rigid material. Secured to this base 10 and spaced apart, as shown in Fig. 1, are two vertical cylindrical bearing members 11 and 12, having their bottoms closed. The numerals 13 and 14 designate two vertical shafts, having their lower end portions rotatably mounted in the two bearing members 11 and 12 respectively. In order that these shafts will easily rotate in the bearing members, I have pointed the lower ends of the shafts, as shown in Fig. 1, and such pointed ends are designated by the numeral 15. Extending between and secured to the two bearing members is the net 16. The numerals 17 and 18 designate two target wings rigidly secured to the two shafts 13 and 14 respectively. These two wings are designed to normally rest in the same plane and terminate only a slight distance from each other, as shown in the drawing. The lower marginal side edges of each of these target wings terminate a slight distance above the top of the net 16 and are prevented from swinging forwardly beyond the net 16 by a projection 19, rigidly secured to each of the bearing members and extending upwardly to a point where they may engage the forward sides of

the two target wings, as shown in Fig. 1. Each of these rotatably mounted target wings is yieldingly held in a normal position above the net 16 and in engagement with the projection 19 by a coil spring 20, coiled around each of the bearing members 11 and 12, having its lower end rigidly secured to the bearing member which it embraces and its upper end engaging the rear side of the target wing adjacent to it.

To increase the yieldable force of the coil springs 20 on the target wings, it is merely necessary to lift the shafts 13 and 14 upwardly to a point where the upper ends of the springs 20 do not engage the rear sides of the target wings, and manually rotate the upper portion of the springs one or more additional revolutions around the bearing members, after which the shafts 13 and 14 are lowered to permit the rear sides of the target wings to be again engaged by the free ends of the coil srings. To decrease the tension of the springs 20 they should be allowed to unwind one or more revolutions from around the bearing members independently as we have seen of the target wings.

By this arrangement if a moving force such as a golf ball in flight strikes either one of the target wings, that target wing so struck will be moved to the rear by the impact and against the action of the coil spring holding that particular wing to a normal position, as shown in Fig. 1. This movement to the rear of either of the target wings is shown in dotted lines in Fig. 2, and as the force of impact of the golf ball is only momentary, the coil spring 20 will immediately return the target wing so effected to its normal position extending toward and in a direct line with the other target wing. The movement of either wing to the rear will be relative not only the force with which the golf ball engages it, but also as to the point on its area where the golf ball makes contact in its flight. Naturally the further from the target wing shaft that the ball strikes the target wing, the more leverage will this force have to move the target wing to the rear against the action of the coil spring 20 and the friction experienced in the rotating of the target wing supporting shaft.

To aid in the proper rotatable supporting of the shafts 13 and 14, I have provided a vertical post 21 at the side of each shaft, as shown in Fig. 1. These vertical posts have their lower ends rigidly secured to the base 10, and their upper ends bent to loosely embrace the upper end portion of the shaft adjacent to them. In order to protect the golf balls striking the target wings and also to increase the absorption of shocks experienced by the target wings from golf balls in flight, I have provided a resilient pad 22 such as fabric or sponge rubber completely covering the front side of each of the target wings. The numeral 23 designates a horizontal arm rigidly secured to the top of the shaft 13 and extending to the rear at approximately a ninety degree angle to the target wing 17. The numeral 24 designates a similar horizontal arm rigidly secured to the top of the shaft 14, but extending forwardly and at an angle of approximately ninety degrees to the target wing 18. The numeral 25 designates a link having one end pivotally secured to the free end of the arm 24 and its other end pivotally secured to the free end of the arm 23, as shown in Fig. 2. By this arrangement the target wings 17 and 18 are operatively connected to each other and when either wing is moved in either direction the other wing will be similarly and equally moved. When either the target wing 17 or 18 is moved to the rear, the reciprocated action of the link 25 will be to the left and the arm 23 will cut the path of an arc also to the left.

The numeral 26 designates an outwardly projecting lug on the free end of the arm 23. The numeral 27 designates a bracket rigidly secured to the post 21 adjacent the shaft 13. This bracket 27 supports a horizontal table base 28 having a slot 29 extending in an arc, as shown in Fig. 2. Slidably mounted in this slot is a designating needle base 30 having an upwardly extending pointer or needle 31, as shown in Fig. 3. It will here be noted that the bracket 27 is so positioned that the lug 26, when the shaft 13 is rotated to the left, will engage the needle base 30 and move the same to the left in the slot 29. The numeral 32 designates a horizontal scale band secured by suitable means to the member 28 and having on its face adjacent the needle 31, suitable indicia such as numbers to be considered in distances such as yards. In order that the pointing end of the needle 31 will travel in close proximity to this scale band as the needle base 30 is moved in the slot 29, the scale band 32 has its length extending in an arc corresponding with the arc formed by the curved slot 29.

By this arrangement of parts, when the target wings 17 and 18 are forced to the rear by the impact of a golf ball the lug 26 will move the member 30 carrying the needle in its slot to the left and the distance the member 30 will move in the slot will be relative to the extreme rear swinging movement of the target wings to the rear. As the lug 26 only engages the right side of the needle base 30, the needle base 30 will not return in its slot 29 to a neutral position with the lug 26, thereby permitting the leisurely reading of the needle 31 on the scale band to determine the driving force of the golf ball striking either or both of the target wings. If the golf ball struck the central portion of the target the needle 31 would designate the number of yards or distance the golf ball would have

gone had it not been stopped by coming in contact with the golf target.

Of course, if the golf ball did not strike near the center of the target its force would be penalized in distance recorded, due to the fact that it would experience less advantageous leverage on the two target wings and this lack of lever advantage would increase with and be relative to the distance from the center portion of the golf target. In other words, my golf target registers and is affected in its registering by both force and direction of the golf ball.

By both target wings being operatively connected with each other, to both move to the rear together and at the same speed, no registering disadvantage is obtained by the golf ball striking the dead center line between the two target wings. To enable the player to drive the golf ball near the center line between the two hinged target wings, the character of a green may be painted or otherwise formed near the center of the golf target, as shown in Fig. 1. Other characters, such as sand traps, trees, fairways, and the like may also be added to the front of the target wings to make the game seem more realistic.

After the designated yardage has been noted the needle base 30 is moved to the right in its slot 29 to a neutral position in order that the needle 31 points to zero. This is manually accomplished by pulling a small rope 33 which has its forward end secured to the base 30, as shown in Fig. 4. This rope 33 extends around a small sheave 34, through an eye 35 on the post 21 and then leads to a convenient place where it may be grasped by the operator.

If the players desire, they may be permitted one stroke with each of the clubs that they would use in a golf game and the total score in distance yards would be their respective scores per hole. The main thought is that they may not only use their own clubs, but drive the golf balls with the same energy and force as if they drove the golf balls on an actual golf course.

By having the base 10 slightly above the teeing position, the golf balls after striking the target wings, will drop downwardly and roll back to the teeing ground.

With my registering golf target an enjoyable golf game may be played, which does not only furnish suitable exercise, but promotes the better playing of the user when he plays a game of golf on an actual golf course.

Some changes may be made in the construction and arrangement of my improved registering golf target without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In a device of the class described, two spaced apart rotatably mounted shafts, a flat target wing member designed to be struck by golf balls in flight rigidly secured to each of said shafts; said two wing members designed to normally rest in a common plane and of such dimensions as to have their outer marginal ends terminating adjacent to each other, stop means engaging said two wing members for preventing the swinging movement thereof forwardly of their said normal positions when returning to said normal positions after being moved from said normal positions by golf balls in flight, and coil springs engaging and yieldingly urging said wings into engagement with said stops and against movement by golf balls in flight.

2. In a device of the class described, two rotatably mounted spaced apart shafts, a wing member designed to be struck by golf balls in flight rigidly secured to each of said shafts, a means for operatively connecting said two wing members to each other in order that their movements will be simultaneous, a spring means for yieldingly urging said two wings to a normal position in a common plane and against movement by golf balls in flight, and a registering mechanism operable by movement of said wings for designating the distance said two wings are moved away from their normal positions.

MERLE E. BAKER.